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| APPLICATION NO.                      | FILING DATE    | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|--------------------------------------|----------------|----------------------|-------------------------|------------------|
| 10/777,876                           | 02/12/2004     | William P. Lanigan   | 400200                  | 6711             |
| 75                                   | 590 01/26/2005 |                      | EXAMINER                |                  |
| George H. Gerstman SEYFARTH SHAW LLP |                |                      | LIEU, JULIE BICHNGOC    |                  |
| 55 East Monroe Street                |                |                      | ART UNIT                | PAPER NUMBER     |
| Chicago, IL 60603                    |                |                      | 2636                    | -                |
|                                      |                |                      | DATE MAILED: 01/26/2005 |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |  | Au   | / |  |  |  |
|---|--|--|---|--|--|--|
|   | Application No.  | Applicant(s)   |   |  |  |  |
|   | 10/777,876   | LANIGAN ET AL.   |   |  |  |  |
| Office Action Summary   | Examiner   | Art Unit   |   |  |  |  |
| •   | Julie Lieu   | 2636   |   |  |  |  |
| The MAILING DATE of this communication app  | ears on the cover sheet with the c   | orrespondence address  |   |  |  |  |
| Period for Reply  | LIC OCT TO EVDIDE 2 MONTH  | e) EDOM  |   |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). |   |  |  |  |
| Status  |  |  |   |  |  |  |
| 1) Responsive to communication(s) filed on 12 Fe  | ebruary 2004.  |  |   |  |  |  |
| 2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This  | action is non-final.   |  |   |  |  |  |
|   | <del>/</del>   |  |   |  |  |  |
| closed in accordance with the practice under E  | x parte Quayle, 1935 C.D. 11, 45   | i3 O.G. 213.   |   |  |  |  |
| Disposition of Claims   |  |  |   |  |  |  |
| 4)⊠ Claim(s) <u>1-30</u> is/are pending in the application.   |  |  |   |  |  |  |
| 4a) Of the above claim(s) is/are withdray   | vn from consideration.   |  | • |  |  |  |
| 5) Claim(s) is/are allowed.   |  |  |   |  |  |  |
| 6)⊠ Claim(s) <u>1-22 and 24-30</u> is/are rejected.   |  |  |   |  |  |  |
| 7) Claim(s) 23 is/are objected to.  |  |  |   |  |  |  |
| 8) Claim(s) are subject to restriction and/or   | election requirement.  |  |   |  |  |  |
| Application Papers  |  |  |   |  |  |  |
| 9) The specification is objected to by the Examine  | г.   |  |   |  |  |  |
| 10) The drawing(s) filed on is/are: a) acce   | epted or b) objected to by the B   | Examiner.  |   |  |  |  |
| Applicant may not request that any objection to the   | •  | • • •  |   |  |  |  |
| Replacement drawing sheet(s) including the correcti   |  |  |   |  |  |  |
| 11)☐ The oath or declaration is objected to by the Ex   | aminer. Note the attached Office   | Action or form P10-152.  |   |  |  |  |
| Priority under 35 U.S.C. § 119  |  |  |   |  |  |  |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of  | s have been received.<br>s have been received in Applicati<br>ity documents have been receive<br>(PCT Rule 17.2(a)).   | on No ed in this National Stage  |   |  |  |  |
| Attachment(s)   | <b>∆</b> □ 1-1 : : 0   | (DTO 442)  |   |  |  |  |
| 1) X Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 4) Interview Summary Paper No(s)/Mail Da   | · ·  |   |  |  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>2/12/04</u> .   | 5)  Notice of Informal P 6) Other:   | atent Application (PTO-152)  |   |  |  |  |

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#### **DETAILED ACTION**

# Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

## Claim Objections

2. Claim 26 is objected to because of the following informalities: it appears that claim 26 should depend on claim 16 instead of 6. Clarification or correction is required.

# Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. Claims 1-6 and 8-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Meyer et al. (US Patent Appl. No. 2004/0178880).

# Claim 1:

Meyer discloses a security system for a cargo container having a door comprising:

- a. an electronic control unit 10 operably communicable with a remote computer 15 a terminal and capable of performing at least one activity and monitoring at least one function
- b. a first software control program (inherent) within the electronic control unit to monitor the activity and the function, and
- c. a second software control program within the remote computer terminal capable of retrieving the activity and the function from the first software control program.

#### Claim 2:

The voltage source 159 in Meyer supplies power to the electronic control unit.

# Claim 3:

The security system in Meyer further comprises a second voltage source 58 to supply power to the electronic control unit if the first voltage source is inadequate.

#### Claim 4:

The second voltage source 59 is a battery.

# Claims 5 and 6:

Meyer discloses a protocol to facilitate communication between the electronic control unit and the remote computer terminal (page 6, para [0065]).

#### Claim 8:

The electronic control unit 10 includes a means to record a plurality of events in the nonvolatile memory. Page 2, para. [0035].

#### Claim 9:

The system in Myer comprises a lock 25 operably coupled to the electronic control unit and disposed adjacent to the door in order to lock the door in a closed position, thereby defining a locked status.

#### Claim 10:

The electronic control unit 10 monitors the locked status.

# Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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6. Claims 7, 11-22, and 24-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer et al. (US Patent Appl. No. 2004/0178880).

#### Claim 7:

The electronic control unit 10 includes a microcontroller, a nonvolatile memory, a real time clock, a radio frequency receiver, and a temperature sensor. Though not clearly stated, a skilled artisan would have readily recognized that to include in the system of Meyer's an analog to digital converter, a motor driver, and a serial communication port because these are common electronics components necessary for processing the signals in the system.

# Claim 11:

The radio frequency receiver is capable of receiving a remote command. Page 7, para. [0070].

#### Claim 12:

Though not specifically discussed, it would have been obvious to one skilled in the art that most computer would have a real time clock settable coupled in the computer.

#### Claim 13:

In Meyer, the temperature creates an alarm condition.

# Claim 14:

Meyer does not disclose the use of a keyfob. Nevertheless, the use of a key fob to operate a secured locked door is conventional in the art. Thus, a skilled artisan would have readily recognized using a key fob to operate the electronic unit in the Meyer system instead of the other user input device because the use of a key fob is conventional in the art.

## Claim 15:

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Meyer discloses a method of monitoring and recording a condition of a cargo container having a lockable door using a cargo security system comprising:

- a. an electronic control unit 1- capable of monitoring at least one function and creating an alarm condition,
- b. a sensor 90 capable of measuring a parameter and being operably coupled to the electronic control unit; and
- c. a remote terminal computer 15 capable of operably communicating with the electronic control unit.

The method comprising:

disposing the electronic control unit 10 within the cargo container 20.

The reference fails to disclose comparing the parameter with the table having a parameter limits and creating the alarm condition if the parameter does not comply with the parameter limits. However, the reference does suggest monitoring the change in parameters such as temperature, humidity, and barometric pressure. The information is transmitted and used at the central location 15. Thus, it would have been obvious to one skilled in the art to compare the detected parameter and provide alarm when the detected parameter is outside the limits because it would provide the operator with further abnormal conditions in the system.

#### Claim 16:

Meyer discloses a method for controlling a cargo security system, the method comprising:

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a. providing an electronic control unit capable of performing at least one activity and

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monitoring at least one function, and having a software control program for controlling

its activities

b. communicating with a remote computer terminal using a unique serial

protocol,

c. providing a program in said remote computer terminal using communication

protocol to adjust security system settings, and

d. providing a battery backup 155 to operate the security system if an external

power source 59 is not available.

Claim 17:

The software program in the remote computer terminal enables the monitoring of system

status, the retrieving of logged events, and problem diagnosis.

Claim 18:

The rejection of claim 18 recites the rejection of claim 7, except it is a method claim.

Claim 19:

In Myer, an event log in nonvolatile memory is kept up to date and continuously

maintained. It is not clear whether overwriting the old ones with the new ones and the memory

occurs in Myer such that the last set number of events, based on memory size. However, one

skilled in the art would have readily recognized overriding the older events with new ones if

there is not enough memory in order to keep the most recent information.

Claim 20:

In Myer, the log event records in a nonvolatile memory inherently have a different structure to save memory space and record more information.

#### Claim 21:

Automatic converting a real time clock from GMT to local time, and automatically adjusting for daylight saving time in a computer is conventional in the art, thus, this claimed step would not be considered an inventive step.

# Claim 22:

A supply voltage 55 is selected to extend the operational time of the back up battery, the method further comprising measuring a main power source continuously to determine that it has enough power to supply the security system. The reference fails to disclose forcing the system to use the main power source if available, even though the back up power source has a higher voltage. However, a skilled artisan would have readily recognized that it would be desirable to conserve battery power and only use it when it is necessary; that is, only when the main power is unavailable or inadequate.

#### Claim 24:

The system in Myer includes steps of measuring temperature and supply voltage. The reference fails to disclose increasing control pulse duration in response to low temperature or voltages. Nonetheless, it would have been obvious to one skilled in the art to use longer control pulse durations in response to low temperature or voltages because it is desirable to maintain the duration of the signal for control.

## Claim 25:

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Meyer fails to include the step of triggering an alarm condition in response to rapid temperature or voltage changes. However, it would have been obvious to one skilled in the art that the rapid temperature of voltage changes indicates abnormality and would provide an alarm when such condition is detected.

#### Claim 26:

Meyer fails to disclose including the steps of providing a security device latch, providing one of a short reverse pulse and a high impendence to stop security device latch movement at a desired position. However, the use of a latch to maintain the lock position of a door lock is conventional in the art, therefore, one skilled in the art would provide a latch for the lock of Myers. Regarding the claimed providing one of a short reverse pulse and a high impedance to stop the latch movement at a desired position, it is within the knowledge of a skilled artisan to employ these steps or the equivalent thereof to put the door latch at the desired position. This feature would not be considered inventive.

#### Claim 27:

The Meyer system includes a security system using GPS signal and cellular phone to send control signals. Page 4, para [0054].

#### Claim 28:

The method in Meyer includes the step of accepting a customer's input from an intelligent keypad for sending controlled signals to the security device and for bypassing a serial protocol. Page 7, para [0071].

## Claim 29:

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The use of low, high and default passwords to protect and access a security system is conventional in the art. Therefore, one skilled in the art would have readily recognized the desirability of implementing the system in Meyer to include different passwords level to gain access to the system.

# Claim 30:

Meyers fails to disclose using a license file containing pair of security device serial numbers and associated low-level user passwords. However, this only presents a choice in design as to what to use to operate the system accordingly.

# Allowable Subject Matter

7. Claim 23 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hisano, US 2003/0160693

Balley, III et al., US 2004/0066328.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Lieu whose telephone number is 571-272-2978. The examiner can normally be reached on Mon-Fri 9AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Julie Lieu

Primary Examiner

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